



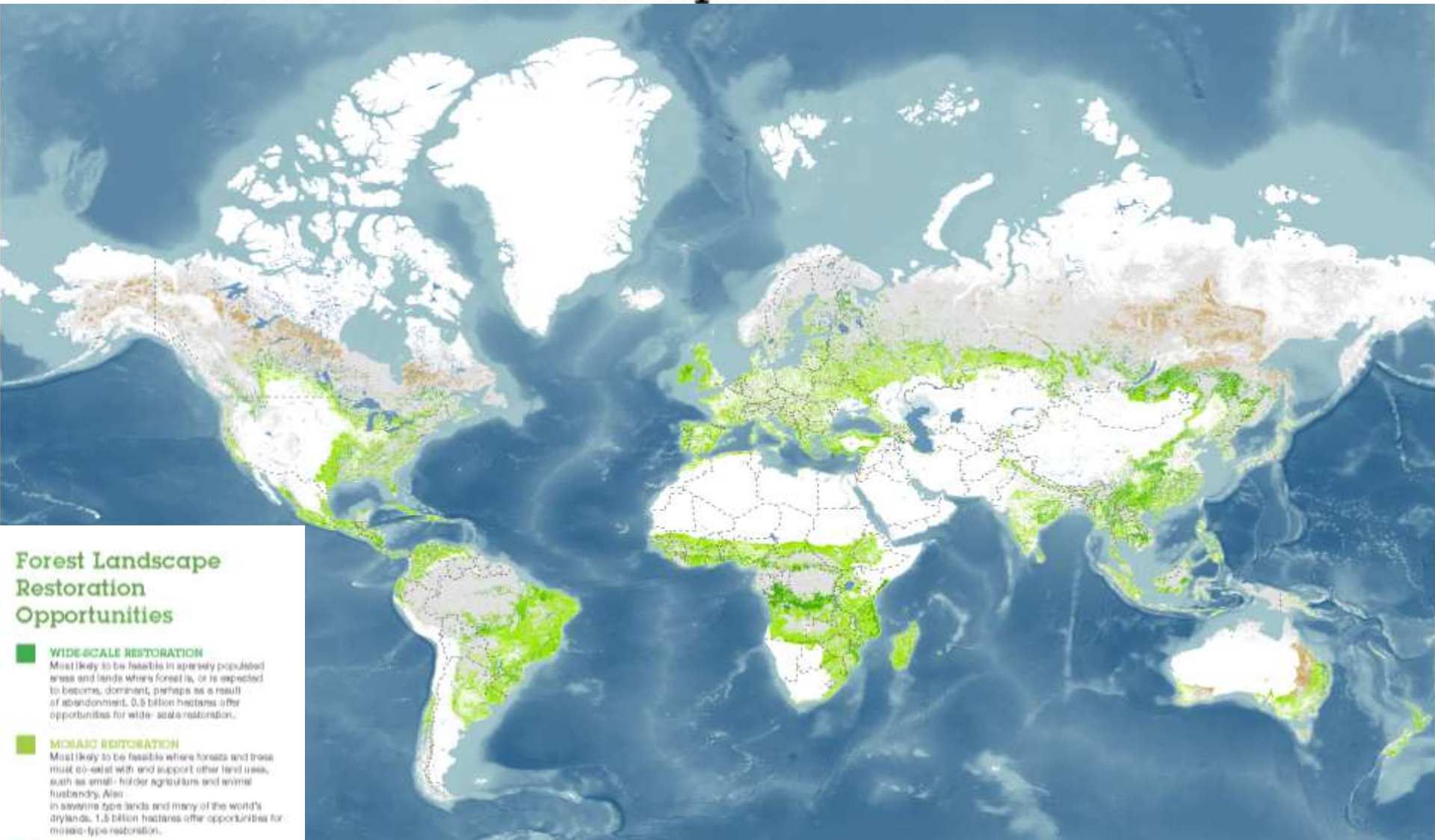
Forest and Landscape Restoration



This Presentation Will Cover

- Global potential for restoration
- The forest and landscape restoration approach
- Partnerships that are driving change
- How IUCN is supporting restoration
- Mangroves for the future programme

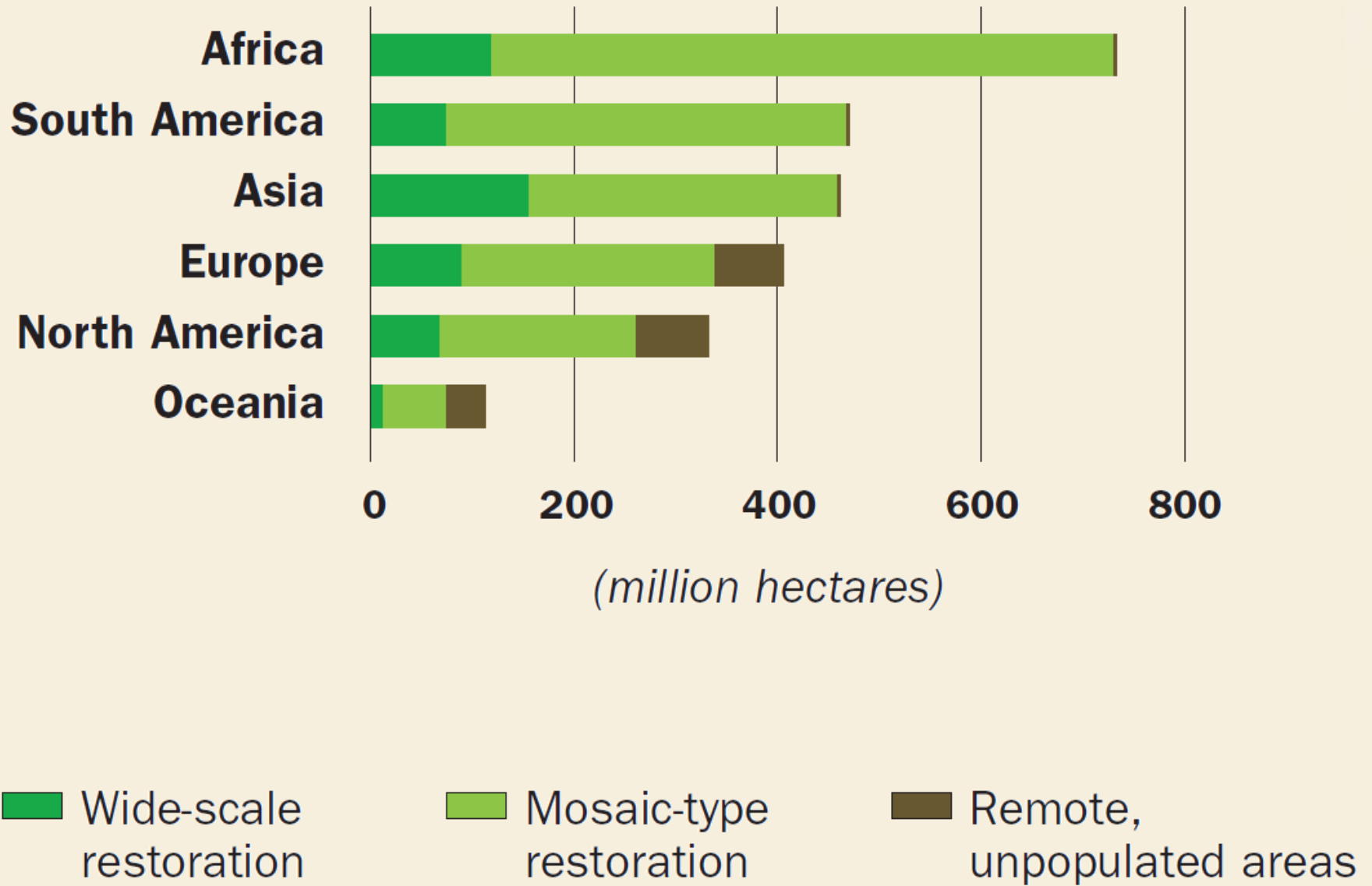
A World of Opportunity for Forest and Landscape Restoration



Forest Landscape Restoration Opportunities

- **WIDE-SCALE RESTORATION**
 Most likely to be feasible in sparsely populated areas and lands where forest is, or is expected to become, dominant, perhaps as a result of abandonment. 0.5 billion hectares offer opportunities for wide-scale restoration.
- **MOSAIC RESTORATION**
 Most likely to be feasible where forests and trees must co-exist with and support other land uses, such as small-holder agriculture and animal husbandry. Also in savanna-type lands and many of the world's drylands. 1.5 billion hectares offer opportunities for mosaic-type restoration.
- **REMOTE RESTORATION**
 Restoration of remote, unpopulated areas may not be feasible, even if otherwise suited for wide-scale restoration.
- **FOREST WITHOUT RESTORATION NEEDS**
 Landscapes where the forest density is not significantly below its natural potential.

There is incredible opportunity for restoration of degraded lands across the world



But “more trees” will not necessarily bring society the full range of benefits natural lands provide



A restored forest landscape incorporates many diverse land uses - based on the context of the land and the needs of the community

Wide-scale and mosaic restoration opportunities





Mosaic restoration

Widescale restoration

Mosaic restoration

Diversity delivers a broader range of forest goods and services...



Across different land uses



For different social groups



©Nathan Dappen

Restoration at the landscape level

Forest Landscape Restoration Potential

An aerial photograph of a lush green landscape. In the foreground, there are several rectangular agricultural fields, some with different shades of green and brown, suggesting various crops or stages of cultivation. The middle ground is dominated by a large, rounded hill covered in dense, vibrant green forest. The background shows more rolling hills under a clear, bright sky. The overall scene conveys a sense of a well-maintained and productive natural environment.

**CARBON
CAPTURE &
STORAGE**

STABLE & RICH SOILS

BIODIVERSITY

**STABLE SUPPLIES OF
CLEAN WATER**

**FOOD SECURITY &
NUTRITION**

**TIMBER & FOREST
PRODUCTS**

**RECREATION &
ECOTOURISM**

Forest Landscape Restoration Options

An aerial photograph of a forest landscape with various restoration options labeled. The landscape features a central hill, a valley with agricultural fields, and surrounding forested areas. The labels are placed over different parts of the landscape to indicate specific restoration strategies.

IMPROVED TREE
PLANTATION
MGMT

ASSISTED REGENERATION
ON SLOPES

TREE PLANTINGS ON
WATER WAYS

NATIVE SPECIES
PLANTING

TREE CROPS MIXED
WITH FIELD CROPS

IMPROVED TREE
PLANTATION
MGMT

NATURAL
REGENERATION OF PARK
BUFFERS

Forest Landscape Restoration:

Delivers ecological integrity and human well-being through multi-functional landscapes

FLR



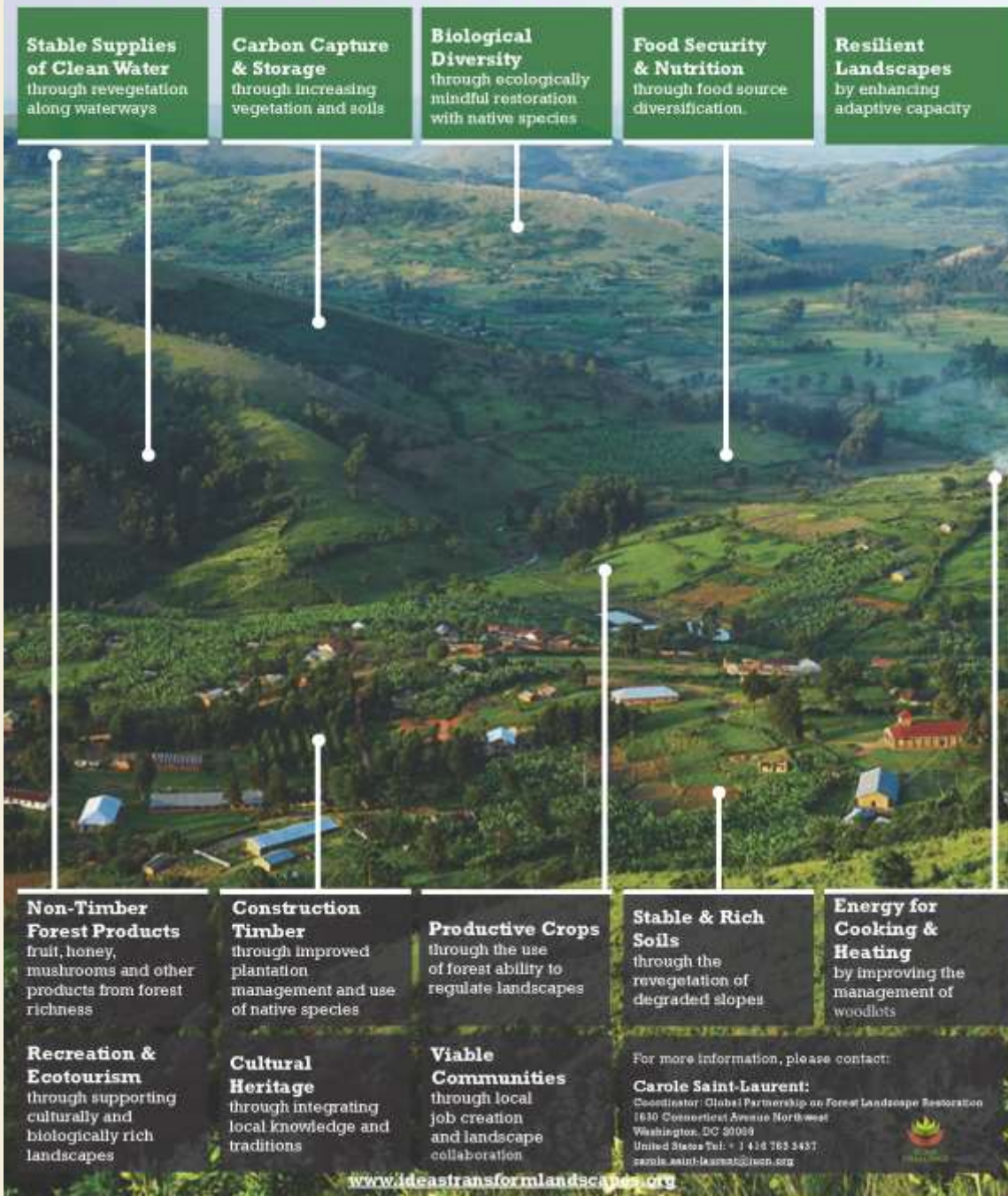
Bringing people together to identify, negotiate, and implement practices that restore an agreed optimal balance of the ecological, social, and economic benefits of forests and trees within a broader pattern of land uses



The Forest and Landscape Restoration Approach

- Restoring "forward" to meet current and future uses:
 - Thinking long-term over large areas
 - Learning and adapting over time
- Restoring functionality and productivity, not "original" forest
- Balancing local needs with national and global priorities
- Using a package of diverse restoration strategies

Solutions for a Cultivated Planet



Emphasize & quantify all the benefits

Example:

The former “Desert of Tanzania” now benefits from

- 500,000 ha of new forests
- A further 1.5 million ha of new agroforestry
- Improved food security
- More children stay in school
- Women are empowered
- USD 14 per person per month compared to national monthly avg. of USD 8.50
- 42 Mt CO₂e sequestered





A Summary of IUCN's Work on Forest and Landscape Restoration

Goal

Transform deforested and degraded landscapes into healthy and productive systems benefitting human wellbeing and the planet.

Approach

- Support countries, organizations, communities and enterprises in adopting a forest & landscape restoration approach.
- Support pledges to the Bonn Challenge and New York Declaration.
- Develop tools, frameworks, and knowledge in support of the above.
- Build capacity and mobilize networks and members.
- Seeks to inspire and create a global restoration movement.



Partnerships to Advance Forest and Landscape Restoration

The **Global Partnership on Forest/Landscape Restoration** was launched by the UK, IUCN and WWF at FAO COFO in 2003. The GPFLR works to:

1. Build support for forest restoration with key decision makers, at the local and international level; and
2. Provide information and tools to strengthen restoration efforts around the world.



Together we launched the Bonn Challenge in 2011

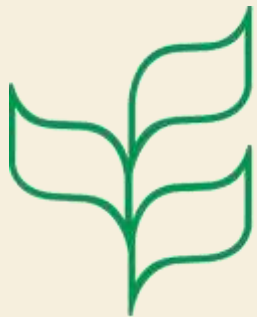


A global goal to restore
150 million hectares of
degraded and deforested
lands by 2020

Increased to **350 million
hectares** by 2030 under
the New York Declaration
on Forests as part of the
2014 UN Climate Summit



The Bonn Challenge will serve as an important implementation vehicle for existing global commitments, including:



Convention on Biological Diversity



United Nations Framework Convention on Climate Change



UNCCD

United Nations Convention to Combat Desertification



SUSTAINABLE DEVELOPMENT GOALS

17 GOALS TO TRANSFORM OUR WORLD

UN-REDD PROGRAMME



The United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries

Bonn Challenge Contributors

89.034 Million Hectares

	Millions of Hectares
Argentina	1
Asia Pulp and Paper	1
Brazil Atlantic Forest PACT	1
Burundi	2
Chile	0.5
Colombia	1
Costa Rica	1
DRC	8
Ecuador	0.5
El Salvador	1
Ethiopia	1
Ghana	1
Guatemala	1.2
Honduras	1

	Millions of Hectares
India	13
KPK (Pakistan)	0.384
Liberia	1
Madagascar	1
Mexico (National)	7.5
Campeche (Mexico)	0.4
Quintana Roo (Mexico)	0.3
Yucatan (Mexico)	0.25
Mozambique	1
Nicaragua	2.8
Niger	3.2
Peru	3
Rwanda	2
Uganda	2.5
US Forest Service	15

The benefits of meeting the goal will be great. 150 million hectares of forest and landscape restoration will:



Produce \$84 billion per year in net benefits to local and national economies

Sequester an additional 1 GtCO₂e per year

Reduce the current “emissions reduction gap” by 11% to 17%.

Increase crop yields by 30% on up to 50 million hectares.



Many paths to success: scaled-up FLR interventions

Knowledge

Filling knowledge gaps with new products based on global analysis and in-country experiences

Tools

Developing & road testing methodologies for:

- Assessing restoration potential
- Assessing ecosystem goods and services
- Monitoring of restoration outcomes

Capacity

Building virtual and in-person platforms and programmes linking practitioners from around the world

Influence

Integration of assessment findings and analysis in policies and investment decisions from the landscape to the international level

Outreach

Online, Farm Radio and ICT campaigns, media briefings and high level events to mobilize support from diverse audiences



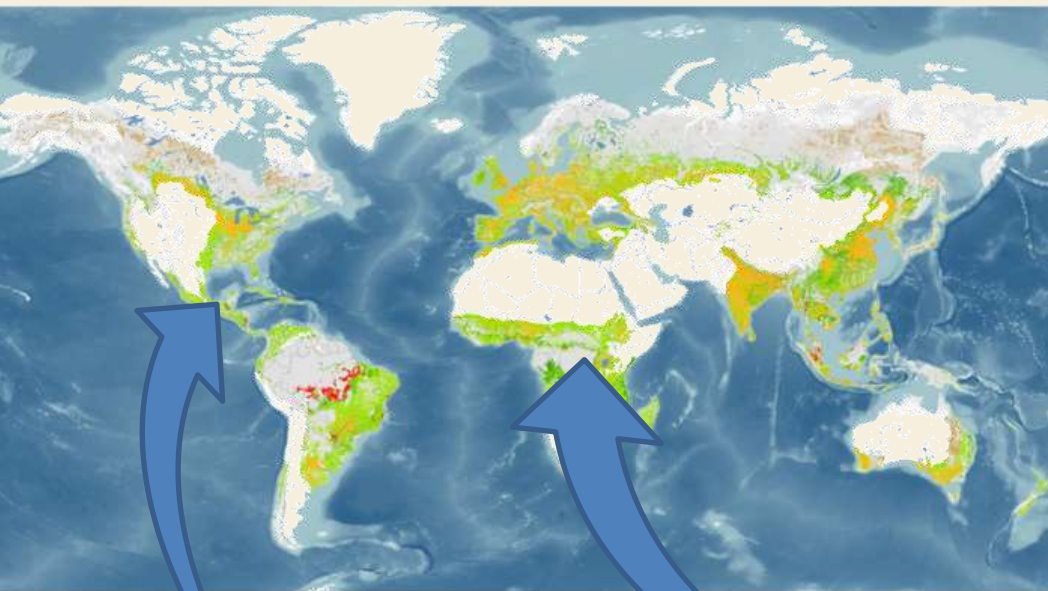
Supporting countries in defining pledges and.....



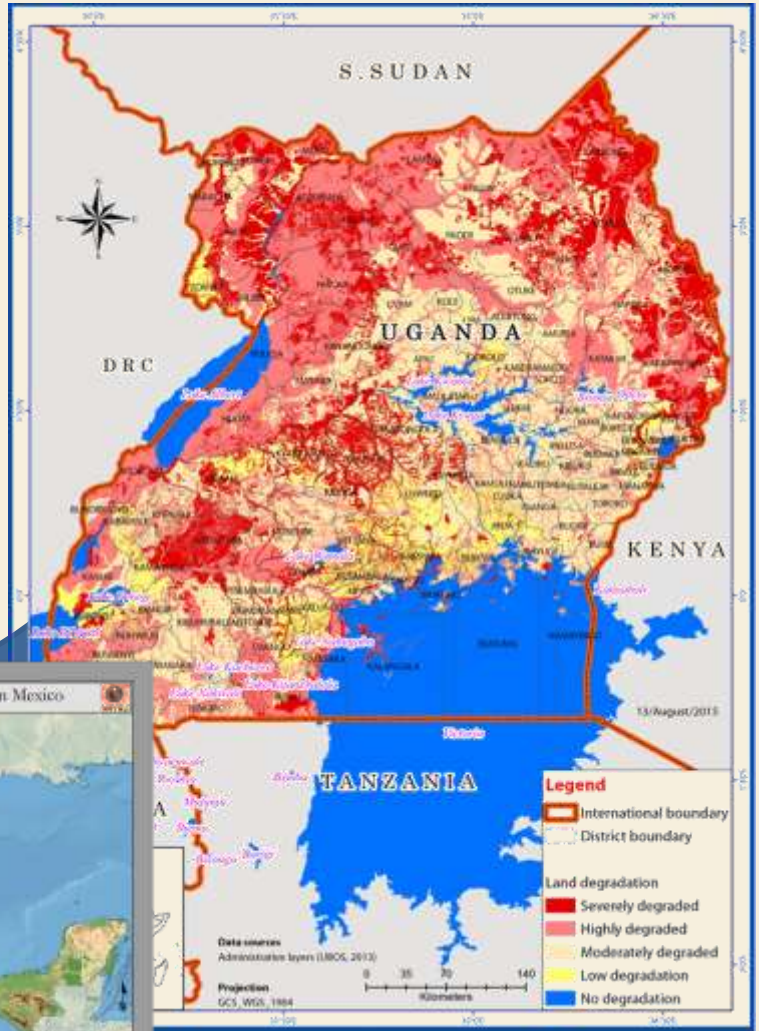
..and implementing the Bonn Challenge at scale



A World of Opportunity for Forest and Landscape Restoration



- | | |
|--|---|
| FOREST AND LANDSCAPE RESTORATION OPPORTUNITIES | OTHER AREAS |
| ■ Wide-scale restoration | ■ Agricultural lands |
| ■ Mosaic restoration | ■ Recent tropical deforestation |
| ■ Remote restoration | ■ Urban areas |
| | ■ Forest without restoration needs |



- Legend**
- International boundary
 - District boundary
- Land degradation**
- Severely degraded
 - Highly degraded
 - Moderately degraded
 - Low degradation
 - No degradation

Data sources:
Administrative layers (IBRC 2012)
Projection:
GCS_WGS_1984



The challenge is to move from the global generic to the national specific



Aggregated map

- Top priority for restoration
- Second-level priority for restoration
- Third-level priority for restoration

The Mexico assessment produced this map of priority areas for FLR, based on an aggregation of seven national-level GIS datasets (three of which are shown here).

.... and to identify priority actions and priority landscapes

National and sub-national FLR programmes can offer workable and cost-effective strategies for landscapes like this



Rwanda's deforested mountains hold tremendous potential for restoration that can improve lives

...and this...



...and this...



...and this

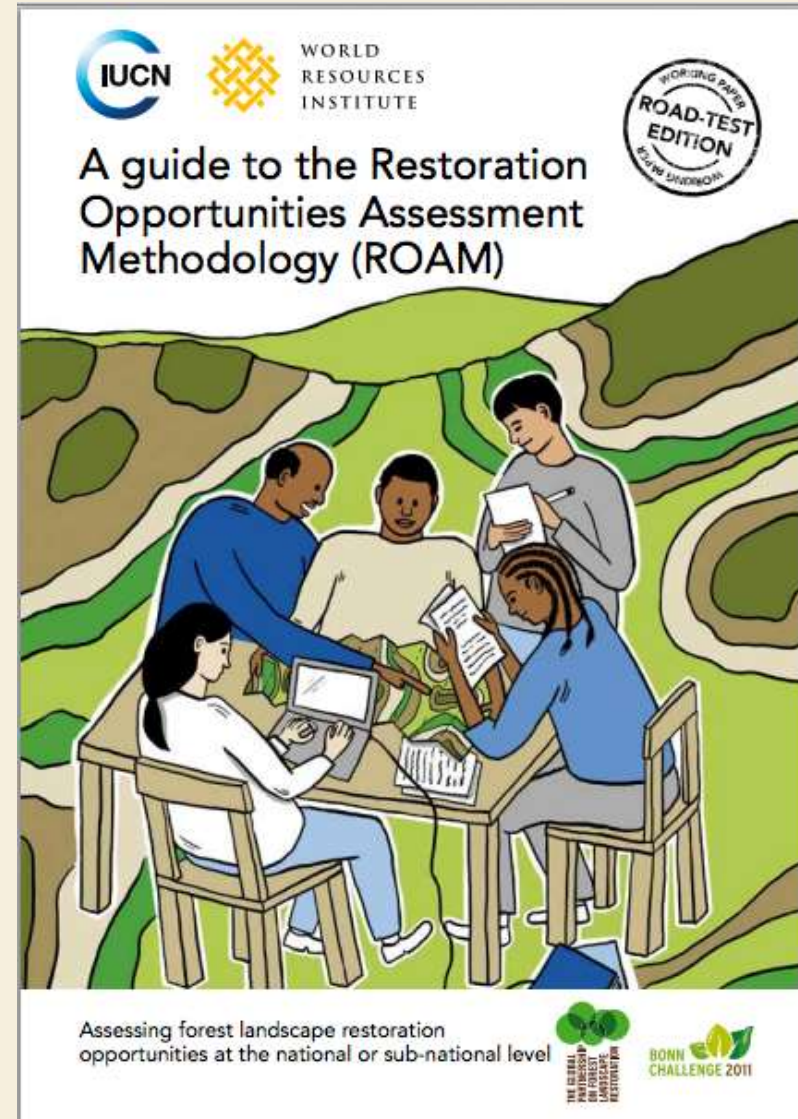


One way forward is the Restoration Opportunities Assessment Methodology (ROAM)

ROAM is a framework, produced by IUCN and WRI, for assessing national and subnational restoration potential – and much more.

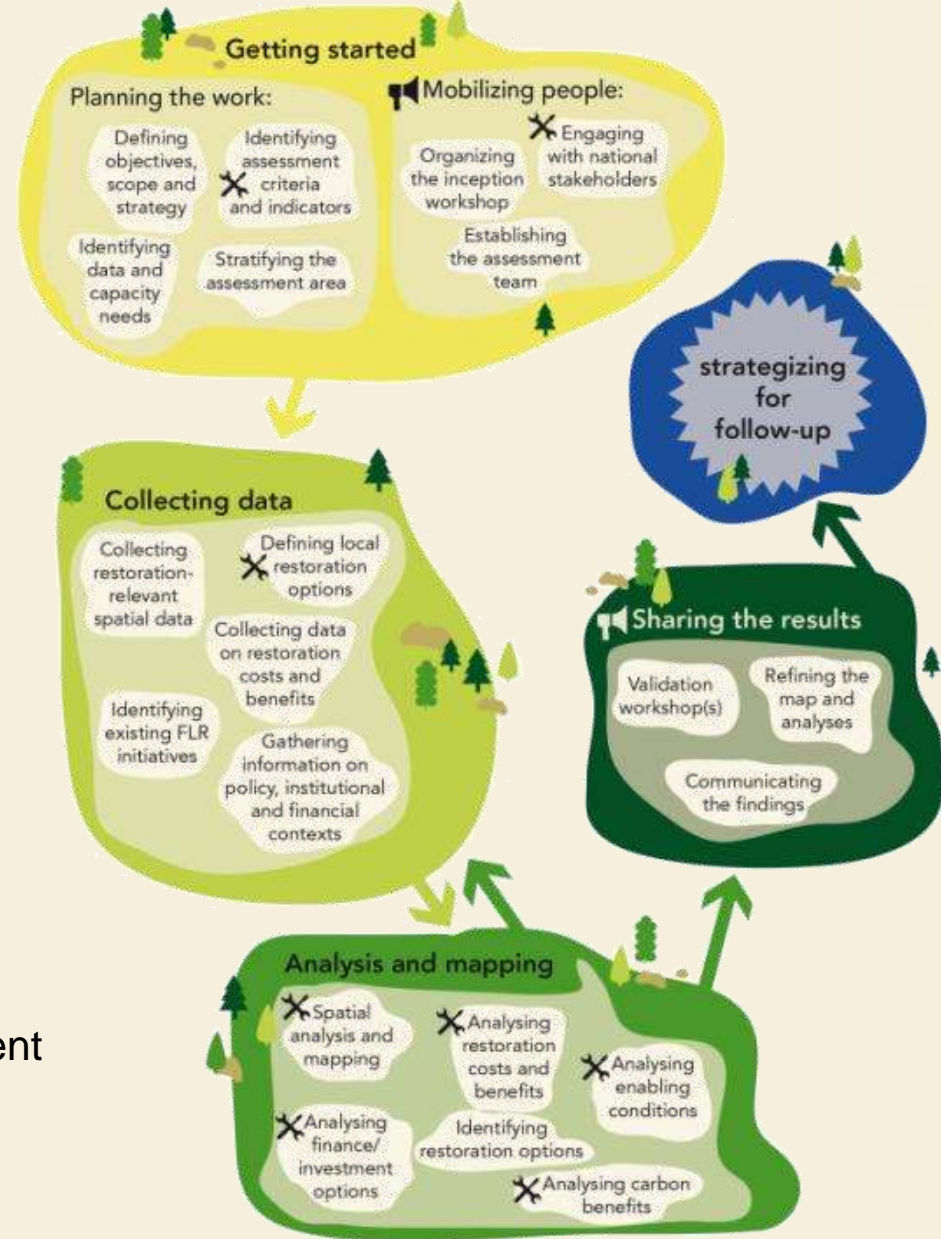
It can help governments and institutions:

- Estimate the costs and benefits of restoration strategies and opportunities
- Find the best, priority landscapes to start restoration
- Set the stage for national-level strategies on restoration
- Provide often-missing landscape-level data
- Build high-level support for restoration

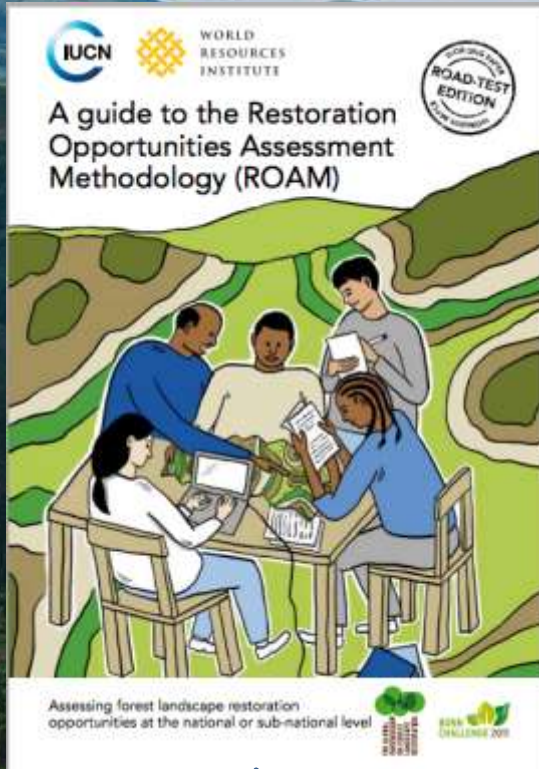


ROAM involves

1. Preparation and Planning for FLR
 - Stakeholder coordination and support
2. Data Collection and Analysis
 - Spatial analysis and mapping
 - Benefit and cost appraisal
 - Carbon abatement costs and accrual
 - Restoration diagnostic
3. Results and Recommendations
 - Validation of results
 - Identification of restoration and investment options



What kinds of outputs can we expect from FLR and ROAM?



ROAM: Global to local and scaling up

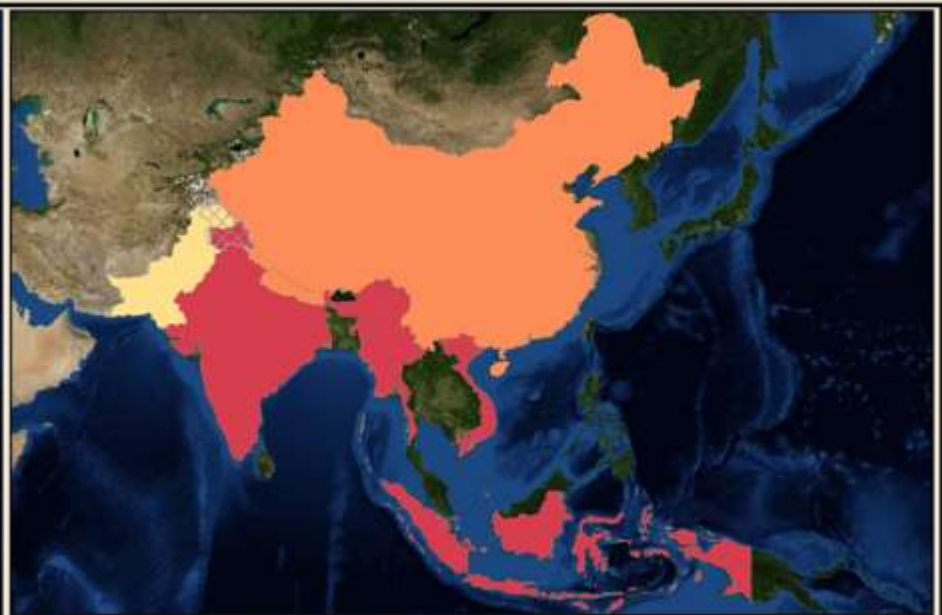
Session 3: Exchanging Forest Landscape Restoration Experience: Rwanda and Brazil

Moderators: Félix Ngendabanyikwa and Robert Wild



IUCN is supporting restoration using ROAM, or its components, in over 30 countries.





Status

- Planned
- Tentatively Planned
- Technical Support
- Ongoing
- National Completed

Forest Landscape Restoration Assessment Countries



Partnerships that drive local and global change are essential



ARC



WORLD BANK GROUP



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